Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	WC Docket No. 07-135
Establishing Just and Reasonable Rates for Local Exchange Carriers	)	
	)	WC Docket No. 05-337
High-Cost Universal Service Support	)	CC Docket No. 01-92
	)	
Developing an Unified Intercarrier Compensation Regime	)	

REPLY COMMENTS

of the

KANSAS RURAL INDEPENDENT TELEPHONE COMPANIES;
STATE INDEPENDENT TELEPHONE ASSOCIATION; and
RURAL TELECOMMUNICATIONS MANAGEMENT COUNCIL

The above organizations of independent Kansas providers of basic and advanced telecommunications services hereby submit their reply comments.

The predominant principle established by Congress in the Communications Act of 1934, and reinforced in 1997 under the Telecommunications Act of 1996, is that the public interest is best served by the provision of universal communications service throughout the United States. The Federal Communications Commission in order to implement this Congressional objective established the universal service fund to facilitate extension of this service to all Americans. This objective has expanded appropriately to include broadband. The Telecommunications Act of 1996 mandated that ALL providers of subject services contribute to that objective in an equitable and nondiscriminatory manner.

The Federal Communications Commission's current proposals for implementation of a worthy objective are diametrically opposed to the Congressional mandates of the 1934 and 1996 Acts. As evidenced through these reply comments and attachments, and through the comments of numerous other parties, these proposals would impose economically disastrous consequences on the State of Kansas and much of rural America.

I. COMMENTS ADDRESSING THE PUBLIC CONSEQUENCES OF UNIVERSAL SERVICE REFORM

Initial comments of the numerous parties disclose little call for retreat from the broad service objectives underlying the NPRM. The commenting parties acknowledge generally the importance of expanding broadband availability, although commenters differ as to the sufficiency or propriety of proposed broadband standards. The Commission's sweeping proposal for implementation, however, has drawn sharp criticism from numerous sources.

An essential component of many initial comments in this proceeding is the broad recognition of the serious harm that would result from the Commission's proposed reform of universal service. Multiple commenters, including notably many entities charged with protection of the public interest rather than the interest of any particular party, have noted serious flaws in the universal service reform methodology articulated in the NPRM.

State regulators from Maine to California recognize in the NPRM the significant consequence of undoing valuable accomplishments in broadband deployment, threatening to undermine any national effort toward ubiquitous broadband availability. Specific recommendations recognize in particular the deleterious effects of proposed reverse auctions in service areas where broadband-capable facilities have already been deployed. State authorities responsible for preservation and advancement of the public interest, including those that have evaluated and approved the propriety of investments already made, caution against new policy that would erode the public benefit of present achievements in broadband deployment.

Elected representatives have joined appointed regulatory officials in recognizing the dangers posed by the Commission's proposed reform of broadband policy. The Joint Commenters submitted with their additional comments the unanimous resolution of the Kansas Senate calling for significant revision of the FCC's plans; subsequently the Kansas House of Representatives has adopted its own unanimous resolution likewise urging revision. Every Kansas legislator, from both parties and from urban and rural constituencies alike, calls for change in the Commission's broadband policy proposals. The unanimous resolution of the Kansas House of Representatives is submitted herewith as Attachment I.

II. ADEQUATE AND EQUITABLE CONTRIBUTION TO A SUCCESSFUL PROGRAM

While some states' public utility agencies (*e.g.*, Massachusetts and New Jersey) have expressed general support for the Commission's proposed support methodology, that support has been based on opposition to these specific states contributing more support than they receive. This argument contravenes the very notion of a national objective. There is likely no federal undertaking that precisely matches each state's contribution with that state's benefit. Differences in population density, geography and economic activity render public purposes more expensive to achieve in some states than in others. Broad differences from state to state in expenditures for education, defense and public health do not render those national objectives less appropriate or reasonable; similar differences in broadband support expenditures and contribution are unavoidable if a national objective is to be attained.

Concern for the extent of public and ratepayer support is always appropriate, but it is unreasonable and inappropriate to constrain a new program by imposing from the outset an arbitrary limit on the program's overall cost. A commitment of resources inadequate to achieve the program's objectives would cause both failure to meet those objectives and the waste of resources spent on the failed effort.

A more responsible, effective and equitable approach to assurance of appropriate and sufficient support levels would include immediate equitable expansion of the base of contribution, coupled with scrupulous oversight of actual costs to be supported.

Public support should not indirectly subsidize selected providers by mandating continued free or below-cost access to supported networks. The salutary regulatory principle of imposing cost responsibility on the cost-causer remains valid, and any rationale allowing avoidance of fair contribution to local network costs should have been disapproved long ago. Delayed regulatory action on phantom traffic and arbitrary classification of traffic has aggravated requirements for external support. Arbitrage based on contentious distinctions between communications and information services has further distorted equitable allocation of cost recovery responsibilities. Resolution of these issues should precede imposition of a cost-based uniform rate for compensation; "right-sizing" the overall intercarrier component of broadband cost recovery should likewise precede efforts to set an appropriate level of overall additional support necessary for ubiquitous broadband deployment.

Payment of support based on theoretical rather than actual cost would risk insufficient support in some cases, and unwarranted overpayment in others. The national experience with payment of excessive support under the equal support rule should be sufficient to preclude replication of that expensive mistake in any effort to expand broadband availability. Ratepayers should have assurance that their support contributions are no more and no less than necessary to accomplish legitimate objectives. Historic oversight policies have resulted in effective accountability and negligible problematic use of universal service support by rate of return carriers. At least where these carriers have already made broadband commitments, this successful experience with direct oversight of actual cost and recovery should be extended to assure responsible use of broadband support.

III. LEGAL AND PRACTICAL RESTRAINTS ON DRASTIC REDUCTIONS IN INTERCARRIER COMPENSATION

A number of state regulatory bodies, and collectively the state members of the joint board, have asserted this Commission lacks jurisdiction to dictate intrastate access rates. This Commission's proposal to impose drastic reductions in intercarrier compensation for interstate and intrastate traffic alike would impose a simplistic and harmful "one size fits all" regime for compensation of local network operators. In practice, smaller carriers' billing and transaction costs would typically exceed the minimal revenue available at the proposed $0.0007 rate, resulting in an immediate imposition of a functional "bill and keep" methodology. "Bill and keep" is an innocuous-sounding label for the practice of forcing a carrier to go without legitimate compensation for the profitable use by others of the carrier's property.

The legal deficiencies of a sweeping initial reduction in ICC revenues cannot be overcome by general reference to an eventual methodology for revenue replacement. Even if a transfer of compensation burdens to the public at large were warranted, such a transfer would be sufficient only if equal to, and contemporaneous with, the reduction in ICC revenue lost.

When coupled with an overriding policy determination to cap total support at present levels, replacement of present ICC revenue reduction on the scale proposed would prove to be inherently at odds with a proposal to undertake new support obligations for broadband. Put more directly, the Commission cannot replace ICC revenues and deploy new broadband facilities with the same dollar; the commitment of adequate resources to meet new objectives must complement the duty to meet existing cost recovery obligations. State regulators' comments recognize their responsibilities to assure sufficient intrastate support, and oppose the adverse effects intrastate ICC reductions would create.

Any reliance on significant increases in end-user burdens to offset mandated revenue reductions would undermine both new and existing policy. Higher end-user costs will necessarily frustrate rather than promote statutory universal service objectives, as there is an upper limit on sustainable local service charges. Beyond a certain rate level subscribers will discontinue service, initiating ever-increasing burdens on remaining subscribers and causing still more disconnection. The effect will be contrary to existing universal service policy, and will frustrate any effort toward more extensive broadband adoption rates. State regulators have extensive experience with the practical consequences of significant rate revision; their recommendations against the NPRM's likely upward pressure on rates should be given significant weight.

IV. CONSTITUTIONAL INFIRMITIES OF THE COMMISSION'S PROPOSED RULEMAKING

At least two initial commenters – Alexicon and Core Communications – have correctly noted conflicts between the proposals of the NPRM and the Constitution's prohibition on taking of private property without just compensation.

Rural telephone companies have, and will continue to have, statutory obligations to provide traditional voice telephone service whether or not the additional policy of ubiquitous broadband service is implemented. These governmental mandates have obliged rural carriers to make investments and incur extensive costs yet unrecovered. Even if existing statutory obligations were prospectively abrogated by legislation terminating traditional telephone service as a public utility, the government could not retroactively take property by denying continuing compensation for these investments and costs already incurred to serve the public under present law.

Telecommunications, particularly in high-cost markets, is inherently a capital-intensive enterprise that relies extensively on the prudent assumption of long-term debt obligations. The costs of that enterprise do not disappear instantly even if the obligation to provide service is terminated prospectively. A governmental declaration that a public purpose no longer exists cannot relieve government of the obligation to compensate private parties for their past investments and costs not yet recovered. This is particularly true where the government has itself encouraged and enabled the private assumption of long-term debt through governmental loan programs that consider and approve specific private investment to meet public purposes. In these cases, *e.g.*, loans from the Rural Utilities Service, the federal government has required borrowing carriers to pledge entire networks and additional assets to secure repayment of these debt obligations.

There is no legitimate governmental power to declare that a different (related or unrelated) public purpose newly exists, and that the new policy obviates the continuing obligation to compensate private parties for investments made to further the prior public purpose. A comparable circumstance would be a government decision to refuse payment to a highway contractor for a roadway contracted, built and delivered, on the grounds that another route had been subsequently recognized as necessary, and that the money contractually obligated for the first road was now needed to pay for the second.

Supreme Court cases addressing the sufficiency of public utility companies' revenues plainly and uniformly recognize certain minimum requirements for the sufficiency of carrier revenue opportunities under any regulatory scheme. It is the absence of reasonably assured overall opportunity for sufficient recovery that creates an impermissible taking of the carrier's property.

As early as the opinion of the first Justice Harlan in *Smyth v. Ames*, 169 U.S. 466 (1898), the high court has acknowledged as a settled matter the right to revenue yielding a reasonable return on investment made to provide public utility service. A generation later, in *Bluefield Co. v. Pub. Serv. Comm.*, 262 US 679 (1923) the Court more explicitly stated "Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service are unjust, unreasonable and confiscatory, and their enforcement deprives the public utility company of its property in violation of the Fourteenth Amendment. This is so well settled by numerous decisions of this Court that citation of the cases is scarcely necessary." 262 U.S. at 690.

As alternative methods of valuation and regulation have developed, a continuing judicial principle has remained unchanged: regulation of utility revenues must "enable [a] company to operate successfully, to maintain its financial integrity, to attract capital, and to compensate its investors for the risk...." *Power Comm'n v. Hope Gas Co.*, 320 US 591 at 605 (1944).

Chief Justice Rehnquist more recently quoted approvingly the above *Hope standard* in *Duquesne Light Co. v. Barasch*, 488 US 299 (1989). In *Duquesne* the Court approved the particular ratemaking methodology at issue in part because "No argument has been made that these *slightly reduced rate*s jeopardize the financial integrity of the companies, either by leaving them insufficient operating capital or by impeding their ability to raise future capital. Nor has it been demonstrated that these rates are inadequate to compensate current equity holders for the risk associated with their investments under a modified prudent investment scheme." (Emphasis supplied) It is clear that a different methodology denying reasonable assurance of such compensation would have produced the opposite result.

The extensive historical and economic analysis in *Verizon Communications Inc. v. FCC*, 535 US 467 (2002) introduces the new policy principles of the Telecommunications

Act of 1996. The Act's adoption of competition as a policy objective is extensively considered in the Court's evaluation of a challenge to the FCC's methodologies in setting rates for unbundled network elements. For present purposes, however, the critical lesson of *Verizon* is its recognition and preservation of basic Fifth Amendment principles.

Even in the lengthy analysis in *Verizon, supra.*, one key component remains stable and unquestioned: government confiscation through denial of reasonable opportunity for just compensation remains beyond the pale. The Court notes the 1996 Telecommunications Act sets new policy "in favor of novel ratesetting designed to give aspiring competitors every possible incentive to enter local retail telephone markets, *short of confiscating the incumbents' property*. *Verizon, supra.*, 535 U.S. at 489 (emphasis supplied). The Court further noted the specific matter then at issue – the particulars of TELRIC rates – were not even alleged to be "'so unjust as to be confiscatory,' that is, as threatening an incumbent's 'financial integrity.'" (Citing *Duquesne, supra.*) The Commission's proposed reform of universal service and intercarrier compensation, by contrast, directly threatens the financial integrity of numerous incumbents and is therefore impermissible.

Most cases on utilities and takings address the sufficiency of rates charged to customers, but there is no basis to restrict the analysis to the rate component of a carrier's revenues. The Constitutional question arises from a broader evaluation: whether a governmentally regulated carrier's overall allowed revenues, from all regulated sources, are sufficient to compensate that carrier for the use of its property in provision of the regulated public service.

Given the sparse customer base and higher per–customer cost applicable in most rural telephone markets, it may often be the case that there is no such thing as a "just and reasonable rate" charged to retail end-users that alone would satisfy the carrier's Constitutional property rights. Per-customer costs are so substantial that reliance on rate revenues alone would unquestionably lead to significant discontinuation of service. Loss of customers would create a rate increase spiral that would effectively destroy the rate base and leave the carrier without any rate revenue. This circumstance, a product of the governmental mandate of universally available comparable service at comparable affordable rates, underlies the historical development and maintenance of external support mechanisms. Only through external support is there any possibility of high-cost carriers receiving revenue sufficient to meet their costs of providing public utility service.

It cannot be argued that the opportunity to engage in a reverse auction satisfies the mandated "reasonable opportunity" for recovery of public utility costs and investments. A requirement to bid on continued receipt of the existing Constitutional right to recovery would be no more permissible than a poll tax, by which an individual would be required to pay a fee to enjoy the right to vote. Any bid below the amount required for just compensation, based on the bidding carrier's costs and investments, would amount effectively to such an impermissible fee.

Recent cases allow some regulatory discretion in determining *how* a private company providing public utility service may be fairly compensated for its necessary and reasonable costs and investments. Nowhere is there authority for the proposition that the government may decide *whether* such opportunity for recovery is required as a matter of right. Case law at least since *Smyth* is consistent in the basic principle that reasonable opportunity for recovery is required, and the standards of nonconfiscation, financial integrity, access to capital and compensation for risk remain applicable to any prospective compensation method. The NPRM expressly contravenes these constitutional standards by making continuing compensation for past investment conditional.

A reverse auction for support eligibility is not the only component of the NPRM that would violate constitutional protection against taking private property without just compensation. The proposal to base support on total company revenues is equally offensive to the Fifth Amendment. Assuming that an Eligible Telecommunications Carrier received past net revenues to which it was entitled as just compensation, and assuming those revenues were then invested by the carrier to provide a separate and unregulated service, any reduction in support based on new earnings from such a separate service would retroactively deny to that carrier the full benefit of its prior earnings. Prior just compensation effectively would be reclaimed by the government, to the end that compensation sufficient at the time of its receipt would be rendered insufficient *post hoc*. As in the case of a reverse auction, conditioning provision of sufficient support on involuntary "contribution" of separate and distinct revenues would force a carrier effectively – and impermissibly – to pay for its own existing right to just compensation.

Yet another Constitutional infirmity appears in the proposal for drastic reduction in intercarrier compensation (ICC). Stripped to its essentials, the Commission's proposal is to set an arbitrary level of compensation significantly below current interstate *and* intrastate levels, and to require the investors in local networks to make their property available for the benefit of other carriers without regard either to just compensation or to the resulting impact on the affordability of the local providers' services. Absent a concurrent specific, predictable and sufficient revenue replacement mechanism, this proposal would contravene not only the requirements of the Telecommunications Act of 1996 but also those of the Fifth Amendment to the Constitution.

The Commission's proposed reduction in intercarrier compensation discussed *supra* suffers from an additional Constitutional insufficiency beyond the taking of private property without just compensation. In this case the mandated private use of rural incumbents' networks and facilities without just compensation also falls short of the requirement that the taking of private property be for a public purpose. The contemplated reduction of compensation to minimal levels, or effectively to zero, is for the private benefit of the carriers that would gain the free use of others' networks. There is neither requirement nor assurance that the public, as opposed to these free-riding carriers, would benefit. In fact, if a compensatory revenue mechanism were eventually imposed, the public would bear the added burden of the replacement revenue without assurance of public benefit. The only assured transfer of resources, with or without compensating support, would be to those carriers regulatorily freed from the reasonable obligation to pay for their own for-profit use of incumbent carriers' property.

It is insufficient to contend that the mere existence of competition will assure that reduced ICC expenses will necessarily be passed through to consumers in the form of lower rates. The Kansas Corporation Commission has recently studied the efficacy of competition in restraining local service rates in price-deregulated markets. That study disclosed that local service rates have risen under deregulation and competition at rates greater than the rate of inflation. Since competition has proved inadequate to assure the pass-through of reduced costs, it is probable the consequence of significant ICC reduction would be a revenue windfall to carriers regulatorily relieved of their responsibility for costs caused by their use of local networks.

V. ALTERNATIVE METHODOLOGIES TO REFORM SUPPORT AND ADVANCE BROADBAND OBJECTIVES

There are practical alternatives to the provisions of the NPRM that would advance broadband availability without imposing disastrous consequences on rural communities. Proposals submitted by a coalition of national organizations representing small independent carriers, by the Rural Broadband Alliance and by individual consulting firms would enable real progress in expansion of broadband availability.

Each of these plans would avoid the protracted litigation and wasteful replication of existing service that would result from the NPRM as proposed.

Destruction of existing rural broadband services need not and should not be an element of an effective plan to secure additional deployment. Constitutional and statutory mandates as well as responsible regulatory principles require significant revision of proposals impacting independent rural providers. At a minimum the Commission should evaluate and adopt readily available alternatives that would strengthen and improve support funding, rather than overreacting to calls for reform by reversing positive accomplishments under existing policy.

VI. ECONOMIC CONSEQUENCES OF THE NPRM

Accompanying these comments as Attachment II is an economic impact study newly performed by Wichita State University. The study demonstrates the extent of unacknowledged economic costs to Kansas of the Commission's proposed reductions in universal service support. Kansas residents and the Kansas economy would suffer 367 lost jobs, $51,100,757 in lost wages and overall adverse economic consequences amounting to $198,798,221 through 2016, attributable directly to the proposed reduction. If the Commission supports consideration of so-called market-based economic assumptions it is appropriate to consider as additional costs the broader economic consequences that would result.

The Wichita State study demonstrates amply that the proposed reform would have deleterious effects far in excess of the direct deprivation of existing sufficient support. The impact of proposed reform would go significantly beyond that direct harm imposed on rural carriers, adversely affecting rural economies and governmental revenues. State and local governments and school districts will experience revenue losses, adversely affecting their ability to provide necessary public services. Local businesses deprived of existing broadband service would face impediments to investment and employment, further weakening local economies. These consequences would be direct results of the proposed reforms, and their full measure should be considered as additional costs of the Commission's proposal for ubiquitous broadband availability. It should be noted the Wichita State University study does not address the scope of potential ICC revenue losses, carrier loan defaults or the consequences of outright rural carrier failure that would cause further significant economic harm.

Kansas is not unique in its economic reliance on rural telecommunications. The Commission should candidly assess and consider similar adverse effects in all states to be impacted by the prospective uncertainty of sufficient universal service support and intercarrier compensation.

VII. CONCLUSION

The numerous well-founded objections contained in initial comments cannot be brushed aside. Not only individual carriers and industry groups, but also many independent public agencies have identified elements of the NPRM that would cause significant harm and/or impede attainment of broadband objectives.

There is substantial doubt as to the legality of specific components the NPRM. Any significant effort to expand broadband availability will require broad consensus and support; as demonstrated by numerous initial comments, the present NPRM proposals lack that support. The Commission should pursue revisions respecting the contributions of commenters with experience in the provision and regulation of broadband service where geography and demographics are most challenging.

Respectfully submitted,

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Executive Manager, State Independent Telephone Association of Kansas

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Chairman, Rural Telecommunication Management Council

Attachment I

House Resolution No. 6027

By Committee on Energy and Utilities

5-2

A RESOLUTION urging modifications to the National Broadband Plan for the benefit of rural residents of Kansas.

WHEREAS, Residents of this state living in rural areas deserve and expect the same high-quality, affordable communications services that are available to their urban neighbors; and

WHEREAS, Similar to businesses in urban areas, rural businesses, farmers and ranchers compete in the global marketplace and depend on affordable access to robust broadband services to market and sell their products around the world; and

WHEREAS, Children living in rural areas should have the same educational opportunities as their urban counterparts, and high-speed internet access is absolutely necessary to allow these students opportunities for advanced learning through distance education; and

WHEREAS, Residents living in rural areas face unique health care challenges because of the distances that must be traveled to seek basic and advanced medical care, and telemedicine delivered via broadband networks can improve the health of rural residents by reducing the time and travel needed for high-quality health care; and

WHEREAS, Many rural areas encounter significant challenges in pursuing and sustaining economic development plans that bring quality, higher-paying jobs to their communities, and insufficiently robust broadband speeds will further hamper the economic development needs of many rural communities; and

WHEREAS, The United States Department of Agriculture has rightfully placed significant importance on the need for broadband access in rural America to improve quality of life and economic development; and

WHEREAS, Communications providers that serve this state's rural areas have worked diligently to ensure that their consumers have access to affordable and reliable broadband services and have utilized the United States Department of Agriculture's Rural Utilities Service loan and grant programs for economic development; and

WHEREAS, Contrary to the progress rural communications providers have had in deploying broadband, the Federal Communications Commission is embarking on a National Broadband Plan that will negatively impact the ability of residents living in rural areas of this state to realize the true benefits of access to robust broadband speeds by limiting support to four megabits per second in rural, high-cost areas of the country, while calling for one hundred million urban homes to have access to broadband speeds at 100 megabits per second by 2020; and

WHEREAS, The National Broadband Plan runs counter to the federal universal service policy which ensures access to communications services at comparable rates regardless of the consumer's location: Now, therefore,

Be it resolved by the House of Representatives of the State of Kansas: That we challenge the Federal Communications Commission to make substantive change to the National Broadband Plan so that the plan develops a universal service support mechanism that ensures accountability, promotes stability, provides efficient and effective incentives for broadband network deployment and operation and encourages broadband adoption by keeping broadband service affordable. The plan should also ensure high-quality service by linking funding to satisfying reasonable, but meaningful, carrier of last resort obligations. Consistent with the universal service principles in federal law, the plan should ensure that rural and urban consumers pay reasonably comparable rates for reasonably comparable services by providing adequate support in high-cost areas; and

Be it further resolved: That we urge the members of the Kansas Congressional Delegation, the Secretary of the United States Department of Agriculture and the Administrator of the Rural Utilities Service to work with the Federal Communications Commission to ensure that commissioners understand the importance of robust broadband deployment to rural Americans and how the current draft of the National Broadband Plan needs to be dramatically altered to ensure quality broadband service availability throughout the country; and

Be it further resolved: That the Chief Clerk of the House of Representatives be directed to provide an enrolled copy of this resolution to the commissioners of the Federal Communications Commission, the members of the Kansas Congressional Delegation, the Secretary of the United States Department of Agriculture, the Administrator of the Rural Utilities Service, the Chief Technology Officer in the White House Office of the Science and Technology Policy and the Governor of Kansas.

Attachment II

W. Frank Barton School of Business

Center for Economic Development and Business Research

Kansas Rural Local Exchange Carriers

Assessing the Impact of the National Broadband Plan

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Summary

The Center for Economic Development and Business Research, W. Frank Barton School of Business, Wichita State University (CEDBR) conducted this study to evaluate the economic impact of proposed changes in funding of Kansas Rural Local Exchange Carriers (RLECs). The Notice of Proposed Rulemaking (NPRM), to implement the National Broadband Plan (NBP), released by the Federal Communications Commission (FCC) in March 2010, proposes to reallocate Federal Universal Service Funds (USF) currently distributed to RLECs. This study estimates the economic and fiscal impact of the Kansas RLECs currently and with the redistribution of the USF funds on the regional and state economy.

With the exception of Wyandotte County, a Kansas RLEC provides services in 104 of the 105 Kansas counties. In general, the areas served by the 37 Kansas RLECs have lower average annual incomes, a declining population base and the lowest population densities of the state. Collectively, Kansas RLECs serve more than 50% of the geographic area and less than 10% of the telephone customers in Kansas.

The direct jobs and the service that the Kansas RLECs provide have a significant impact on the communities and local governments. In 2010, Kansas RLECs directly employed 1,005 people and created a total of $53,724,040 of wages in rural Kansas. Those same 1,005 jobs create and support an additional 1,627 jobs within the economies they serve. The total employment impact of Kansas RLECs is 2,632 jobs, which supports $92,700,831 of total wages in 2010.

It should be noted that this study, when looking at the impact of the NPRM, takes a limited-direct approach to evaluating the impact. The authors of this study recognize that this does not completely estimate the full impact this regulatory action will have on the local economies served by the Kansas RLECs. Other potential impacts that should be noted, but were beyond the scope of this study, include the following:

- Intercarrier Compensation Reform
- Community Donations
- Volunteer Time
- Community Leadership
- Economic Development Leadership
- Disruption of telecommunication/broadband services provided to anchor institutions (e.g. schools, libraries, hospitals, and health clinics)

As a basis for this analysis, CEDBR used survey data from 35 of the 37 RLECs located in Kansas. This data was provided by each Kansas RLEC and included information about its business, employees, payroll and taxes paid, as a basis for the analysis. The results were calculated using the Fiscal Benefit Cost Model. The model takes into account industry substitution and multipliers. In addition, it looks at the flow of money from a company or entity to taxing districts and the flow from the taxing district to the company. CEDBR looks at income streams

from sales and purchases of the entity under review, employees and the payrolls associated with employees.

The reduction in funding to Kansas RLECs from the NPRM is estimated to average $28,715,201 a year between 2012 and 2016, for a projected loss of funding during the five years totaling $143,576,054.

As a result of the loss of funding, the Kansas RLECs will in turn reduce services and associated staff. The estimated total direct jobs lost between 2012 and 2016 are 140. This will result in a loss of $29,615,044 in wages during the same time period.

The direct job losses are amplified in the economy due to indirect and induced effects, more commonly referred to as an employment multiplier. The employment multiplier is 2.6, which means for every one job lost, there are an additional 1.6 jobs also removed from the economy. Therefore, the total employment impact in rural Kansas is 367 jobs by 2016, with a total wage impact of $51,100,757 over the five-year period.

As a result of these job losses, the State of Kansas is estimated to lose personal income taxes in the total amount of $1,434,472 during the five years covered by the projections.

The reduction in funding to Kansas RLECs from the NPRM will also have an effect on the local governments and the state in the form of sales and property taxes. Over the five-year period, the local governments and the state will lose $1,109,201 in property tax and $1,577,737 in retail sales tax collections.

The proposed loss of over $143 million of USF will require Kansas RLECs to dramatically change their operations and likely cause defaults on loan obligations owed to the federal government and other lending institutions. It is expected that Kansas RLECS will, at minimum, cease operations in numerous highly rural communities across the state. The total employment impact will be a loss of 367 jobs by 2016 and a total wage impact of $51,100,757 over a five-year period. Consequently, this will have a significant negative economic impact on rural Kansas.

Introduction

The Center for Economic Development and Business Research, W. Frank Barton School of Business, Wichita State University (CEDBR), was given the task of analyzing the economic impact of the Federal Communications Commission (FCC) Notice of Proposed Rulemaking (NPRM) to implement the National Broadband Plan (NBP) as it relates to the proposed reduction of Federal Universal Service Funds (USF) distributed to the Kansas Rural Local Exchange Carriers (RLECs). In doing so, CEDBR was able to model the flow of money from businesses to individuals, companies and taxing entities in the state.

Each Kansas RLEC provided CEDBR with survey data about its business, employees, payroll and taxes paid, as a basis for analysis. Survey data for 35 out of 37 of the Kansas RLEC businesses are included in this report.[1]

Background

In March 2010, the FCC released the NPRM, which proposes to change the current federal mechanisms that support deployment of voice and broadband services in high-cost areas. This could shift up to $15.5 billion nationally during the next decade from the existing USF funded programs to support broadband deployment in underserved areas.[2] The plan would expect to be completed in three stages: phase one, 2010-2011, would focus on rulemakings to set the framework; phase two, 2012-2016, would focus on major initial implementation; and phase three, 2017-2020, would complete the transition.[3]

According to an article from Washington Telecom, Media & Tech Insider, to shift the money to broadband, without raising overall costs, the NPRM proposes two changes in the funding for RLECs. Price-capped RLECs would have $457 million in annual USF interstate access support (for past access charge cuts) shifted over from voice to broadband. The Rate of Return RLECs would be shifted to incentive regulation (presumably price caps), with per-line access replacement frozen.[4]

Service Area

All telephone exchange service areas are considered rural for state purposes in Kansas, except those served by AT&T or CenturyLink. For federal purposes, in Kansas, all exchanges except those served by AT&T are considered rural.[5] The geographic boundaries of these service areas do not coincide with county or city boundaries. For the purpose of this study, CEDBR looked at population and wage information at the county level.

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[1] Appendix A has a full list of the Kansas RLECs participating in the study

[2] Federal Communications Commission – National Broadband Plan, Executive Summary, Pg. XIII

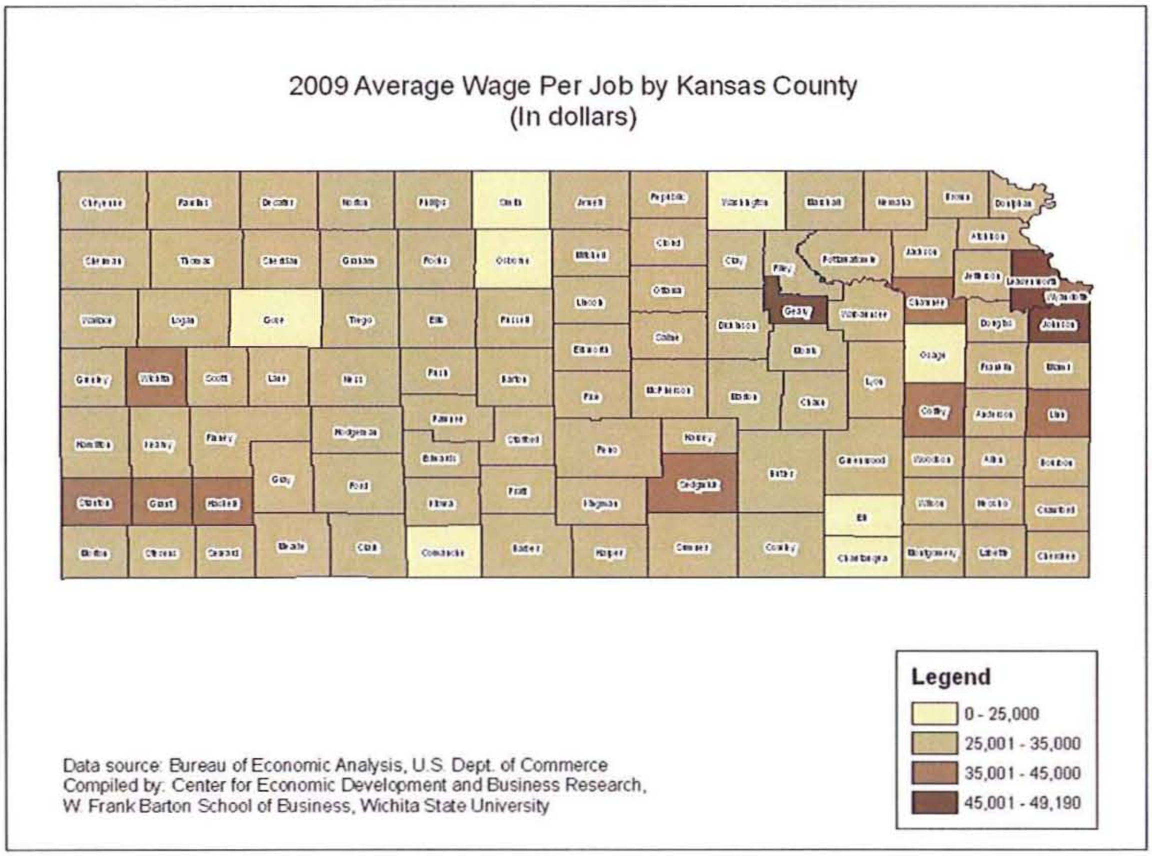
[3] Washington Telecom, Media & Tech Insider, FCC National Broadband Plan – First Look, March 16, 2010

[4] Washington Telecom, Media & Tech Insider, FCC National Broadband Plan – First Look, March 16, 2010

[5] Kansas Corporation Commission

Kansas is one of the most rural states in the nation, ranking 42nd highest in population density based on 2010 census data.[6] Its counties range in density from Johnson County with a density of 1,133 persons per square mile to Greeley County, with an estimated 1.6 persons per square mile.[7] With the exception of Wyandotte County, a Kansas RLEC provides services in at least some portion of each county.

The customers of Kansas RLECs live in and around rural communities. The average wage per job is lower in counties that are predominately rural than in more urban counties. The average wage per job in metropolitan areas in Kansas is $42,373, while in rural areas the average falls to $31,155.[8]



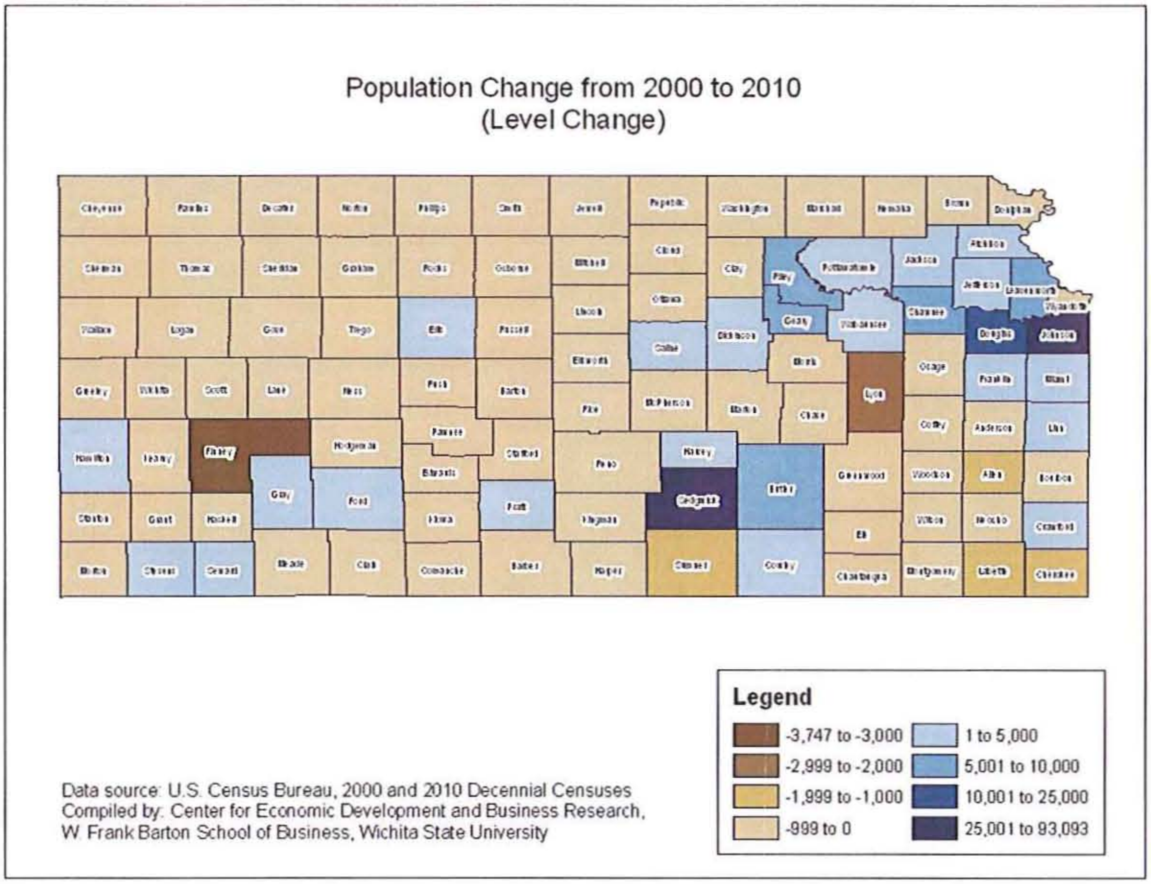
[6] U.S. Census Bureau

[7] U.S. Census Bureau, 2010 Population counts, 2000 Area in square miles

[8] Regional Economic Information System, Bureau of Economic Analysis, U.S. Department of Commerce http://www.bea.gov/regional/docs/footnotes.cfm?tablename=CA34 , 'December 2010.'

In general, the communities served by the Kansas RLECs have seen population declines in the last ten years. The Kansas City and Wichita Metropolitan areas have seen the majority of the population growth in Kansas.

Kansas RLECs provide low cost services in areas where telephone rates would be higher due to the regions being sparsely populated. This lower cost service is attributable, in part, to USF support.



In Kansas, each RLEC receiving USF is designated by the FCC as a Carrier of Last Resort (COLR). COLRs are required by law to provide service to any customer in a service area that requests it, even if serving that customer would not be economically viable at prevailing rates. As stated in a study by The National Research and Regulatory Institute, these policies were established to provide service to low income, low population areas because competition by itself cannot ensure broad-based access to telephone service. Competitors may avoid serving areas that are high cost, sparsely populated or filled with subscribers of limited means, while incumbent providers may seek to discontinue service in those same areas.[9]

Low Cost Services

The services or functionalities that are currently supported by USF are: voice-grade access to the public switched telephone network; local usage; dual tone multi-frequency signaling or its functional equivalent; single-party service or its functional equivalent; access to emergency services; access to operator services; access to long distance services; access to directory assistance; and toll limitation for qualifying low-income consumers.[10] The FCC is attempting to modify this focus to include broadband deployment. The reduction of USF distributed to Kansas RLECs proposed in the NPRM could create the need to increase fees for existing services.

An increase in fees may impact consumers in rural areas differently depending on carrier options in their area. Across the state, there are a variety of markets served by Kansas RLECs. They are sometimes, but not always, the only provider of telephone service. Depending on the availability of alternative service providers, consumers will react differently to a potential increase in the cost of phone service. Telephone calls are highly elastic between service options.[11] This means that as the price of service increases, consumers will easily move between available service providers to find a lower price. However, access to telephone service is inelastic.[12] In areas where there is only one provider, consumers are not sensitive to price. As the price of the service increases, they will pay the higher price to keep the service and reduce their spending in other areas. The impact of the reduced spending in other areas is beyond the scope of this report.

Access to the Internet supported by USF can be important to the development of rural communities. From the National Telecommunications and Information Administration, Research Preview, February 2011, in a survey of 54,000 households and 129,000 people, more than 68 percent of U.S. households currently use high-speed broadband access. However, rural America lags behind urban areas by ten percentage points (60% versus 70%) in the adoption of broadband. From this same survey, the number one reason (38.7%) households do not have an Internet connection at home is cost.[13]

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[9] Bluhm, Peter, Phyllis Bernt, *Carriers of Last Resort: Updating a Traditional Doctrine,* National Regulatory Research Institute, 09-10 July 2009, http://www.nrri.org/pubs/telecommunications/COLR_july09-10.pdf.

[10] Kansas Corporation Commission

[11] Train, Kenneth E., Daniel L. McFadden and Moshe Ben-Akiva, The demand for local telephone service: A fully discrete model of residential calling patterns and service choices, *The Rand Journal of Economics,* Spring 1987, Vol.18 NO. 1, ABI/INFORM Global, pg. 109

[12] Ellig, Jerry, Costs *and Consequences of Federal Telecommunications and Broadband Regulations,* Washington: Fall 2005, Vol. 28, No.3, pg. 40-44.

[13] Digital Nation – Expanding Internet Usage, NTIA Research Preview, February 2011, U.S. Department of Commerce, National Telecommunications and Information Administration.

Methodology

Fiscal Benefit Cost Model

CEDBR calculates benefits and costs using the Fiscal Benefit Cost Model. The model takes into account industry substitution and multipliers. In addition, it looks at the flow of money from a company or entity to taxing districts and the flow from the taxing district to the company. CEDBR looks at income streams from sales and purchases of the entity under review, employees and the payrolls associated with employees.

For the purpose of this project, average regional tax rates were used when calculating impacts to the region. The actual impact could vary based on the specific location of the Kansas RLEC.

The model takes each benefit and applies the appropriate tax scenario. As an example, an employee is paid a wage on which income taxes are paid. The employee spends their income on housing, which is assessed a property tax, and on retail trade, which is assessed a retail sales tax. It is assumed that 50 percent of all wages are subject to retail sales tax. It is further assumed that 100 percent of wages are subject to federal income tax, as well as state income tax.

In the Fiscal Benefit Cost Model, all data used in the model are subject to a substitution and a multiplier effect.

Substitution Effect

Substitution occurs when new investment displaces current resources and jobs from one entity to another. This study includes this effect, except for USF, an inflow of federal funds within the state and region. All USF are new to the area and would not currently exist within Kansas without the Kansas RLECs.

RIMS II Multipliers

RIMS II multipliers from the Bureau of Economic Analysis, aggregated for the State of Kansas, were used to calculate total economic impacts from industry expansion, net of substitution. The notion of a multiplier effect arises due to the interrelatedness of local industries. For example, if the demand for aviation products increases, this will lead to an increase in demand from industry suppliers. Therefore, payroll increases as a direct result of the expanding firm's operations and indirectly as a result of the expanding firm's increase in demand for locally supplied inputs. The multiplier also addresses the relationship between wages and employee demands on supporting industries, such as retail trade. There is a need for additional employees, who earn wages, as sales in retail trade industries increase. This induced effect measures the impact of expenditures of direct and indirect employees to retail and other industries. The total effect of expansion is the sum of these direct, indirect and induced effects.

RIMS II multipliers are available for final demand output, earnings and employment and were used to assess the economic impact of the 35 Kansas RLECs in this study. Final demand multipliers are used to assess the effect a change in output in one industry has on other industries within an economic region. Direct effect employment multipliers can range in value from 1.2 for child day care services to 5.6 for petroleum refineries.

Direct effect multipliers are reported for both employment and earnings impacts and were used in determining the direct effect of employment and wages. Direct effect multipliers calculate the change in total employment based on a change in a specific industry's employment.

For the purpose of this report, the North American Industry Classification System (NAICS) code for telecommunication carriers was used.

Employee Residence

The methodology used assumes that 100 percent of the Kansas RLECs employees live within the Kansas RLEC's region. Furthermore, it was assumed that, if the Kansas RLECs did not exist, half of the employees living in the region would have to leave. In other words, 50 percent of Kansas RLEC employees live in the region due to the location of their employer. In addition, 70 percent of individuals are assumed to own a home.

Limitations

It should be noted that this study, when looking at the impact of the NPRM, takes a limited-direct approach to evaluating the impact. The authors of this study recognize that this does not completely estimate the full impact this regulatory action will have on the local economies served by the Kansas RLECs. Other potential impacts that should be noted, but were beyond the scope of this study include the following:

- Intercarrier Compensation Reform
- Community Donations
- Volunteer Time
- Community Leadership
- Economic Development Leadership
- Disruption of telecommunication/broadband services provided to anchor institutions (e.g. schools, libraries, hospitals, and health clinics)

If USF were not used to provide Kansas RLEC support, it would be available for alternative use. Estimating the potential economic impact of alternative uses of these opportunity costs was beyond the scope of this analysis.

Data Estimates

The initial phase of the project required CEDBR to define the time period under analysis. The time period was defined by the availability of comparable data; the analysis uses data from 2010 and projected data for 2012 through 2016. Data was held constant between 2010 and 2011. This analysis focuses on the economic impact of a decline in business activity within Kansas.

In order to calculate the fiscal and economic impact of business activity to Kansas, the following data was used:

- Gross Revenue
- Expenditures
- Employment
- Annual Payroll
- Customer Counts

Projected Revenues and Expenditures

Actual revenue, USF funding and expenditure data were provided for 2010. Revenue and USF funding estimates for years 2012 through 2016 were provided. CEDBR assumed that non-USF revenues would remain constant through the analysis period. Pre-NBP revenues were calculated by adding non-USF revenues to estimated USF revenues during the analysis period. Post-NBP revenues were calculated in the same manner, only using NBP adjusted USF data.

Expenses were provided for 2010. In 2010, expenditures were approximately 83 percent of revenues. CEDBR forecasted both pre-NBP and post-NBP expenditures by taking revenues for the given time period times the 83 percent. That being said, it is likely, given current capital expenditures, total expenses will grow to a greater percentage of revenues than in 2010. It should be noted that using 83 percent is a conservative estimate.

The estimated percent change from the proposed NBP is calculated by year.[14] In other words, the proposed change in USF will decrease total revenues by 13.6 percent in 2016.

	Estimated Revenue				Estimated Expenses	
	Pre-NBP	Post-NBP	$ Change	% Change	Pre-NBP	Post-NBP
2010	$261,108,847				$216,088,081	
2012	$268,580,172	$251,354,697	-$17,225,475	-6.4%	$222,271,189	$208,015,756
2013	$274,945,460	$250,065,792	-$24,879,668	-9.0%	$227,538,965	$206,949,086
2014	$276,701,743	$244,235,411	-$32,466,332	-11.7%	$228,992,427	$202,123,987
2015	$273,782,538	$241,185,299	-$32,597,239	-11.9%	$226,576,556	$199,599,780
2016	$267,112,440	$230,705,149	-$36,407,291	-13.6%	$221,056,526	$190,926,633
Total	$1,361,122,352	$1,217,546,348	-$143,576,004	-10.5%	$1,126,435,663	$1,007,615,242

Wages and Employment

Wages and full-time equivalent employment data were provided for 2010. Employment data was estimated based on revenue per employee. In 2010, revenue per employee was approximately $259,900, indicating that to hire an additional employee revenues would need to increase by $259,900. On the other side, each time revenue declines by $259,900, a

[14] Estimated percentage change from NBP was calculated by the percentage change from Pre-NBP revenue to the Post-NBP revenue.

company would need to reduce employment by one employee. Using this assumption, CEDBR estimated employment in 2012 through 2016 prior and post NBP proposed funding changes.

Total wages paid were based on the average annual wage of Kansas RLEC employees and total employment. In 2010, the average annual wage of a Kansas RLEC employee was approximately $53,457. The national annual earnings for wired telecommunication carriers in 2010 were $61,113, according to the Current Employment Statistics from the Bureau of Labor Statistics.

	Wages		Employment	
	Pre - NBP	Post - NBP	Pre - NBP	Post - NBP
2010	$53,724,040		1,005	
2012	$55,242,045	$51,699,079	1,033	967
2013	$56,551,269	$51,433,975	1,058	962
2014	$56,912,504	$50,234,772	1,065	940
2015	$56,312,077	$49,607,419	1,053	928
2016	$54,940,160	$47,451,844	1,028	888

Sums may not add to totals due to rounding.

Economic Impact

The reduction in funding to Kansas RLECs from the NPRM is estimated to total $143,576,054 between 2012 and 2016. The total impact of this loss of USF to the Kansas RLECs in the local economy combines direct loss of jobs at the Kansas RLECs with the indirect and induced effects. The indirect and induced effects are due to: industry substitution; multipliers; the flow of money from the Kansas RLECs to taxing districts; the flow from the taxing district to the Kansas RLECs; income streams from sales and purchases of the Kansas RLECs; employees; and the payrolls associated with employees.

The direct loss of employment as a result of the loss of funding is estimated to be 67 jobs in 2012, with lost wages estimated to be $3,581,603. Job losses are estimated to increase each year. In 2013, there is projected to be 96 jobs lost, with lost wages estimated to be $5,131,849. In 2014, projected losses are 125 jobs with lost wages estimated to be $6,682,095. In 2015, projected losses are 126 jobs with lost wages estimated to be $6,735,551. In 2016, projected losses are 140 jobs with lost wages estimated to be $7,483,946. The total estimated direct loss of jobs between 2012 and 2016 is 140 jobs. This will result in a direct loss of approximately $29,615,043 in wages during the same time period.

The direct job losses are amplified in the economy as a result of the indirect and induced effects, more commonly referred to as an employment multiplier. The employment multiplier is 2.6, which means for every one job lost, there are an additional 1.6 jobs also removed from the economy. The total loss of employment including these effects is estimated to be: 175 jobs and $6,180,055 in wages in 2012; 251 jobs and $8,855,005 in wages in 2013; 327 jobs and $11,529,954 in wages in 2014; 330 jobs and $11,622,194 in wages in 2015; 367 jobs and

$12,913,549 in wages in 2016. As a result of these job losses, the State of Kansas is estimated to lose personal income taxes in the total amount of $1,434,472 during the five years covered by the projections.

Based on the assumption that the job losses will reduce property tax collections, CEDBR estimated the total loss of property taxes at the regional level to be $931,775 and $177,426 at the state level between 2012 and 2016, with the majority of losses occurring in the later years.

The loss of wages in the economy will also reduce retail sales tax collections by an estimated amount of $223,567 at the regional level and $1,354,170 at the state level in the years covered by the projection.

Economic Impact of Total Employment - Pre - NBP									
	Direct Employment	Total Employment	Direct Wages	Total Wages	Property Tax Collections Region	Property Tax Collections State	Retail Sales Tax Region	Retail Sales Tax State	KS Personal Income Tax
2010	1,005	2,632	$53,724,040	$92,700,831	$630,171	$321,864	$405,566	$2,456,572	$2,602,245
2011	1,005	2,632	$53,724,040	$92,700,831	$1,260,343	$321,864	$405,566	$2,456,572	$2,602,245
2012	1,034	2,708	$55,274,286	$95,375,780	$1,908,698	$331,152	$417,269	$2,527,458	$2,677,335
2013	1,058	2,771	$56,557,248	$97,589,531	$2,572,102	$338,838	$426,954	$2,586,123	$2,739,478
2014	1,065	2,790	$56,931,445	$98,235,209	$3,239,895	$341,080	$429,779	$2,603,233	$2,757,603
2015	1,054	2,761	$56,343,421	$97,220,573	$3,900,792	$337,557	$425,340	$2,576,345	$2,729,121
2016	1,028	2,693	$54,953,545	$94,822,342	$4,545,385	$329,231	$414,848	$2,512,792	$2,661,799

Economic Impact of Total Employment - Post - NBP									
	Direct Employment	Total Employment	Direct Wages	Total Wages	Property Tax Collections Region	Property Tax Collections State	Retail Sales Tax Region	Retail Sales Tax State	KS Personal Income Tax
2010	1,005	2,632	$53,724,040	$92,700,831	$630,171	$321,864	$405,566	$2,456,572	$2,602,245
2011	1,005	2,632	$53,724,040	$92,700,831	$1,260,343	$321,864	$405,566	$2,456,572	$2,602,245
2012	967	2,533	$51,692,683	$89,195,725	$1,866,686	$309,694	$390,231	$2,363,687	$2,503,852
2013	962	2,520	$51,425,399	$88,734,527	$2,469,895	$308,093	$388,214	$2,351,465	$2,490,906
2014	940	2,462	$50,249,351	$86,705,255	$3,059,309	$301,047	$379,335	$2,297,689	$2,433,941
2015	928	2,431	$49,607,870	$85,598,379	$3,641,199	$297,204	$374,493	$2,268,357	$2,402,869
2016	888	2,326	$47,469,599	$81,908,794	$4,198,007	$284,394	$358,351	$2,170,583	$2,299,297

Difference between Pre and Post NBP									
	Direct Employment	Total Employment	Direct Wages	Total Wages	Property Tax Collections Region	Property Tax Collections State	Retail Sales Tax Region	Retail Sales Tax State	KS Personal Income Tax
2010	0	0	$0	$0	$0	$0	$0	$0	$0
2011	0	0	$0	$0	$0	$0	$0	$0	$0
2012	-67	-175	-$3,581,603	-$6,180,055	-$42,011	-$21,458	-$27,038	-$163,771	-$173,483
2013	-96	-251	-$5,131,849	-$8,855,005	-$102,207	-$30,745	-$38,741	-$234,658	-$248,573
2014	-125	-327	-$6,682,095	-$11,529,954	-$180,586	-$40,033	-$50,444	-$305,544	-$323,662
2015	-126	-330	-$6,735,551	-$11,622,194	-$259,593	-$40,353	-$50,847	-$307,988	-$326,252
2016	-140	-367	-$7,483,946	-$12,913,549	-$347,378	-$44,837	-$56,497	-$342,209	-$362,502

Appendix A

Kansas Rural Local Exchange Carriers Participating in the Study

Blue Valley Tele-Communications, Inc., Home, KS 66438

Columbus Telephone Co., Inc., Columbus, KS 66725

Craw-Kan Telephone Cooperative, Inc., Girard, KS 66743

Cunningham Telephone Co., Inc., Glen Elder, KS 67446

Elkhart Telephone Co., Inc., Elkhart, KS 67950

FairPoint Communications (Sunflower Telephone Company and Bluestem Telephone Company)
Dodge City, KS 67801

Golden Belt Telephone Assn., Rush Center, KS 67575

Gorham Telephone Co., Inc., Gorham, KS 67640

H & B Communications, Inc., Holyrood, KS 67450

Haviland Telephone Co., Inc., Haviland, KS 67059

Home Telephone Co., Inc., Galva, KS 67443

JBN Telephone Company, Inc., Holton, KS 66436

KanOkla Networks, Caldwell, KS 67022

LaHarpe Telephone Co., Inc., LaHarpe, KS 66751

Madison Telephone, LLC, Madison, KS 66860

Moundridge Telephone Co., Inc., Moundridge, KS 67107

Mutual Telephone Company, Little River, KS 67457

Peoples Telecommunications, LLC, LaCygne, KS 66040

Pioneer Communications, Ulysses, KS 67880

Rainbow Telecommunications Assn., Everest, KS 66424

Rural Telephone Service Co., Inc., Lenora, KS 67645

S & A Telephone Company, Allen, KS 66833

S & T Telephone Coop Assn., Inc., Brewster, KS 67732

South Central Telephone Assn., Inc., Medicine Lodge, KS 67104

Southern Kansas Telephone Co., Inc., Clearwater, KS 67026

Totah Telephone Company, Inc., Ochelata, OK 74051 (serving telephone exchanges in Southeast Kansas)

Tri-County Telephone Assn., Inc. (and Council Grove Telephone Company)
Council Grove, KS 66846

Twin Valley Telephone, Inc., Miltonvale, KS 67466

United Telephone Assn., Inc., Dodge City, KS 67801

Wamego Telecommunications Co., Inc., Wamego, KS 66547

Wheat State Telephone, Inc., Udall, KS 67146

Wilson Telephone Co., Inc., Wilson, KS 67490

Zenda Telephone Co., Inc., Zenda, KS 67159